

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram

- 1. Dr. Pramod Deo, Chairperson**
- 2. Shri R.Krishnamoorthy, Member**
- 3. Shri S.Jayaraman, Member**
- 4. Shri V. S. Verma, Member**

**Petition No 105/2009
(Suo-motu)**

In the matter of

Maintenance of Grid Discipline – Non -compliance of provisions of the Indian Electricity Grid Code by Uttar Pradesh Power Corporation Ltd.

And in the matter of

Uttar Pradesh Power Corporation Ltd, Lucknow ...Respondents

The following were present:

1. Shri. DD Chopra, Advocate, UPPCL
2. Shri. V.P Trivedi, UPPCL
3. Shri. R. K. Johar, UPPCL
4. Shri. B.P.Pant, UPPCL
5. Shri. S.P. Gupta, UPPCL
6. Shri. V. K. Agrawal, NRLDC
7. Shri S.R. Narasimhan, NRLDC
8. Ms. Jyoti Prasad, NRLDC
9. Shri. Vivek Pandey, NRLDC
10. Shir. A.K. Aggarwal, NRPC
11. Shri, A.K. Rajput, NRPC

**ORDER
(Date of Hearing 16.7.2009)**

The Commission, vide its order dated 12.6.2009 directed the respondent to show cause as to why it should not be held guilty of contravention of and non-compliance of the provisions contained in paragraphs 5.4.2 and 6.4.7 of the Indian Electricity Grid Code (Grid Code) despite repeated instructions and messages from Northern Regional Load Despatch Centre and as to why penalty under Section 142 of the Electricity

Act, 2003 (the Act), be not imposed on it for over-drawl of electricity for each occasion during 13.4.2009 to 10.5.2009. The pattern of over-drawl by the respondent during the period in question had been as under:

S. No	Volume of Over-drawal (MW)	Number of time-blocks
1	More than 50 MW and less than or equal to 100 MW	16
2	More than 100 MW and less than or equal to 200 MW	52
3	More than 200 MW and less than or equal to 500 MW	200
4	More than 500 MW and less than or equal to 1000 MW	195
5	More than 1000 MW	26
	Total	489

2. The respondent filed its reply under affidavit dated 13.7.2009. We have gone through the reply and heard the learned counsel and the representative of the respondent. Gist of the submissions by the respondent is as under:

(a) The demand of electricity in the State far exceeds the availability from its own generation and allocation from the central sector. The respondent has alleged that despite repeated requests, there was no increase in the central sector allocation. The respondent has submitted that in order to overcome the shortage, at least three private sector power plants of capacity of 2130 MW are under implementation and the first unit of 300 MW is scheduled to be commissioned in March 2010. Besides, it has been explained, power purchase agreements have been made with several co-generating plants to generate 1022 MW of which 911 MW is already commissioned and the rest is to be commissioned shortly. The State Government has also said to have

undertaken expansion of two power stations by adding 2X250 MW each, which is likely to be completed by 2010.

(b) According to the respondent, demand has increased suddenly due to extreme hot weather conditions. It has been stated that average demand during April 2009 was higher than the demand for April 2008 by 13.7 MU. For the month of May 2009, the average demand had increased by 7.3 MU in 2009 as compared to the corresponding month in 2008.

(c) The other reason given by the respondent in support of over-drawal is the lower availability from power traders. The respondent is stated to have entered into agreements with a number of traders and State utilities. However, against the agreement for purchase of 318 MU of electricity, only 82.7 MU was scheduled in April 2009. In May 2009, against the agreement for 159.3 MU, only 93.8 MU was scheduled.

(d) The respondent has explained that non-establishment of the State Load Despatch Centre in the State is also a contributory factor. The respondent has submitted that although it has been performing the functions of the State Load Despatch Centre, it has not been able to ensure the integrated operation of power system in the State. Learned counsel for the respondent amplified during the hearing that in the absence of the statutory autonomy, the officials of the respondent, which is a corporation under the State Government could not ignore the instructions from the Government.

3. The respondent has also submitted the details of the action taken by it on receipt of every 'B' and 'C' message from NRLDC. Besides, the respondent has also placed on record a few newspaper reports indicating mob violence during shut downs.

4. Representative of NRLDC who was present during the hearing in pursuance of the Commission's direction, submitted that over-drawal by the respondent was a perennial feature. He pointed out that proceedings were taken against the respondent in the past for violations of the Grid Code and these proceedings culminated into imposition of penalty on four occasions in the past. This, however, it was stated, had not deterred the respondent from over-drawing. According to him, out of 488 time-blocks when the frequency was below 49.2 Hz during the period in question, the respondent had over drawn during 453 time-blocks. He pointed out that instantaneous over-drawals by the respondent were more than 1000 MW on a number of occasions with the maximum over-drawal reaching the extreme limit of 1523 MW. Besides, the average over-drawal by the respondent, at frequency below 49.2 Hz. during April 2009 was 463 MW.

5. The representative of NRLDC further submitted that such indiscriminate and heavy over-drawals by the respondent encourage indiscipline by other State constituents who question the authority of the Regional Load Despatch Centre when asked to curtail over-drawal amounting to 100 MW while the respondent over-drew to the tune of 1000 MW. He also mentioned that threatening calls were being received in the control room of NRLDC, purportedly questioning the efforts to enforce grid discipline on the respondent.

6. The representative of NRLDC exhibited data relating to over-drawals by the respondent during May and June 2009 also. However, as the present proceedings are in respect of over-drawals during 13.4.2009 to 10.5.2009 only, we do not take notice of the data exhibited at the hearing.

7. From the submissions made by the respondent, it emerges that over-drawal during low frequency conditions, that is, at frequency below 49.2 Hz is not denied. The respondent has only endeavoured to justify its over-drawals in view of its inability to meet the demand in the State either by increasing generation or procuring adequate additional power from other sources. Deficiency of power and the respondent's inability to meet demand, we are convinced, do not justify over-drawal especially at low frequency conditions and thereby jeopardizing the security of the grid and the consequent damage to all the Thermal Generating machines in the same grid, the stability of Power Systems and those to the user appliances. This type of operations would also reduce the life of generating machines.

8. The respondent has also submitted some details of action taken by it in response to 'B' and 'C' messages received from NRLDC. At the outset, we take note of the fact that the respondent has indicated its action against all but ten messages received from NRLDC. It is seen that on most of the occasions, the respondent is reported to have opened certain lines and on a few instances, it had instructed generating stations to increase generation. Under the above circumstances, the short question for our determination is whether these actions absolve the respondent of the charges of over-drawal in

contravention of the provisions of the Grid Code as narrated in the show cause notice dated 12.6.2009.

9. The charge against the respondent is of non-compliance of the provisions of the Grid Code. Relevant paras of the Grid Code are extracted hereunder for ease of reference:

“5.4.2 Manual Demand Disconnection

(a) As mentioned elsewhere, the constituents shall endeavour to restrict their net drawal from the grid to within their respective drawal schedules whenever the system frequency is below 49.5 Hz. When the frequency falls below 49.2 Hz, requisite load shedding (manual) shall be carried out in the concerned State to curtail the over-drawal.”

6.4 Demarcation of responsibilities

4. Provided that the States, through their SLDCs, shall always endeavour to restrict their net drawal from the grid to within their respective drawal schedules, whenever the system frequency is below 49.5 Hz. When the frequency falls below 49.2 Hz, requisite load shedding shall be carried out in the concerned State(s) to curtail the over-drawal.” (Emphasis supplied)

10. The word “requisite” is significant in the above extracted statutory provisions. It implies that the quantum of load shedding must be up to the level whereby the frequency will rise to a level above 49.2 Hz. An over-drawing utility can be considered to have complied with the provisions of the Grid Code only if the load shedding results in either the over-drawal being completely eliminated or it leads to the frequency rising above 49.2 Hz. Based on this criteria, the respondent can be exonerated of the charge of non-compliance with the provisions of the Grid Code only if there was no over-drawal after receipt of the message till frequency reaches the threshold limit of 49.5 Hz. It is seen that out of the 489 time-blocks during which there was over-drawal by the respondent during the relevant period, there are 257 time

blocks during which over-drawal continued from the previous time-block. We are of the opinion that action taken by the respondent cannot be considered to be adequate in respect of these 257 time-blocks.

11. Non-establishment of the State Load Despatch Centre by the State Government, though a matter of serious concern, cannot be a justification for indiscriminate over-drawal by the respondent. As informed by the respondent, the load dispatch functions are presently performed by the respondent itself. In this manner, as an entity performing the load dispatch functions, the respondent should be in a better control of the situation. The respondent has stated that as a State Government company performing the load dispatch functions, it could not have ignored the directions of the political executive. This, even if true, cannot be taken as an extenuating circumstance to justify over-drawal. We may, however, add that apart from making a bald statement, there is no supporting evidence on record that over-drawals were under the directions of senior Government functionaries or the political executive. In case in the absence of the established State Load Despatch Centre, the respondent is unable to function in accordance with law, it should taken up the matter with the State Government to establish the State Load Despatch Centre.

12. Based on the above, we conclude that the respondent is guilty of contravention of and non-compliance with the relevant provisions of the Grid Code, extracted above.

13. As regards the quantum of penalty, we observe that the respondent is guilty of repeated violation of the provisions of the Grid Code. In the past, on

certain occasions, as pointed out by the representative of NRLDC, the respondent was found guilty of contravention of the provisions of the Grid Code. The instances brought out in the show cause notice dated 12.6.2009 are only repeat of previous violations. We are, therefore, of the view that the maximum penalty under Section 142 of the Act deserves to be levied for each contravention.

14. Accordingly, we direct that penalty of Rs. Two crore and fifty seven lakh at the rate of Rs one lakh for each of the time-blocks (total number 257) during which the over-drawal has continued from the previous time-block, out of the over-drawals listed in Annexure I to the show cause notice dated 12.6.2009 be imposed on the respondent. The necessary details in this regard are contained in Annexure 'A' to this order. The penalty shall be deposited latest by 31.8.2009.

Sd/- [V. S. VERMA] MEMBER	Sd/- [S. JAYARAMAN] MEMBER	Sd/- [R. KRISHNAMOORTHY] MEMBER	Sd/- [DR. PRAMOD DEO] CHAIRPERSON
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New Delhi, dated 21st August 2009

**Time-blocks during which over-drawal at low frequency
continued from the previous block**

S.No	Date	Block	MW
1	13-Apr-2009	3	171
2	13-Apr-2009	7	395
3	13-Apr-2009	12	633
4	13-Apr-2009	13	619
5	13-Apr-2009	14	609
6	13-Apr-2009	46	268
7	13-Apr-2009	47	126
8	13-Apr-2009	48	169
9	13-Apr-2009	58	239
10	13-Apr-2009	59	347
11	13-Apr-2009	60	316
12	13-Apr-2009	64	331
13	13-Apr-2009	67	465
14	13-Apr-2009	68	567
15	13-Apr-2009	86	362
16	14-Apr-2009	9	874
17	14-Apr-2009	20	551
18	14-Apr-2009	42	704
19	14-Apr-2009	43	587
20	14-Apr-2009	44	336
21	14-Apr-2009	45	373
22	14-Apr-2009	46	166
23	14-Apr-2009	52	512
24	14-Apr-2009	58	290
25	14-Apr-2009	59	455
26	14-Apr-2009	62	401
27	14-Apr-2009	63	525
28	14-Apr-2009	64	588
29	14-Apr-2009	67	203
30	14-Apr-2009	83	411
31	14-Apr-2009	86	400
32	14-Apr-2009	92	250
33	14-Apr-2009	93	175
34	14-Apr-2009	94	169
35	14-Apr-2009	95	153

36	15-Apr-2009	2	198
37	15-Apr-2009	3	326
38	15-Apr-2009	4	475
39	15-Apr-2009	5	620
40	15-Apr-2009	6	559
41	15-Apr-2009	7	575
42	15-Apr-2009	8	522
43	15-Apr-2009	12	355
44	15-Apr-2009	13	762
45	15-Apr-2009	14	740
46	15-Apr-2009	15	874
47	15-Apr-2009	16	890
48	15-Apr-2009	17	934
49	15-Apr-2009	18	871
50	15-Apr-2009	19	714
51	15-Apr-2009	20	724
52	15-Apr-2009	58	221
53	15-Apr-2009	64	396
54	16-Apr-2009	17	930
55	16-Apr-2009	23	75
56	16-Apr-2009	24	89
57	16-Apr-2009	42	606
58	16-Apr-2009	55	434
59	16-Apr-2009	60	815
60	16-Apr-2009	63	394
61	16-Apr-2009	91	303
62	16-Apr-2009	94	120
63	17-Apr-2009	1	307
64	17-Apr-2009	6	670
65	17-Apr-2009	7	796
66	17-Apr-2009	8	628
67	17-Apr-2009	11	888
68	17-Apr-2009	12	1073
69	17-Apr-2009	15	1149
70	17-Apr-2009	16	1072
71	17-Apr-2009	17	1021
72	17-Apr-2009	18	910
73	17-Apr-2009	19	861
74	17-Apr-2009	20	727
75	17-Apr-2009	23	166
76	18-Apr-2009	91	157
77	19-Apr-2009	1	140
78	19-Apr-2009	2	360
79	19-Apr-2009	3	392
80	19-Apr-2009	4	441

81	19-Apr-2009	5	307
82	19-Apr-2009	14	746
83	19-Apr-2009	17	916
84	20-Apr-2009	94	796
85	20-Apr-2009	95	721
86	21-Apr-2009	24	375
87	21-Apr-2009	63	555
88	21-Apr-2009	67	166
89	22-Apr-2009	20	1098
90	22-Apr-2009	24	806
91	22-Apr-2009	42	593
92	22-Apr-2009	43	532
93	22-Apr-2009	95	693
94	23-Apr-2009	8	635
95	23-Apr-2009	9	582
96	23-Apr-2009	13	481
97	23-Apr-2009	14	594
98	23-Apr-2009	23	204
99	24-Apr-2009	2	542
100	24-Apr-2009	3	477
101	24-Apr-2009	10	535
102	24-Apr-2009	11	723
103	24-Apr-2009	12	745
104	24-Apr-2009	19	395
105	24-Apr-2009	23	226
106	24-Apr-2009	24	78
107	24-Apr-2009	46	259
108	24-Apr-2009	47	76
109	24-Apr-2009	90	347
110	24-Apr-2009	91	369
111	24-Apr-2009	92	380
112	24-Apr-2009	93	476
113	24-Apr-2009	94	577
114	24-Apr-2009	95	556
115	24-Apr-2009	96	550
116	25-Apr-2009	1	408
117	25-Apr-2009	4	389
118	26-Apr-2009	23	238
119	25-Apr-2009	46	339
120	25-Apr-2009	78	124
121	25-Apr-2009	90	265
122	25-Apr-2009	91	112
123	25-Apr-2009	92	195
124	25-Apr-2009	93	407
125	25-Apr-2009	94	633

126	25-Apr-2009	95	526
127	25-Apr-2009	96	544
128	26-Apr-2009	1	515
129	26-Apr-2009	2	465
130	26-Apr-2009	3	354
131	26-Apr-2009	4	395
132	26-Apr-2009	5	474
133	26-Apr-2009	6	487
134	26-Apr-2009	7	393
135	26-Apr-2009	18	672
136	26-Apr-2009	19	620
137	26-Apr-2009	20	593
138	26-Apr-2009	21	721
139	26-Apr-2009	22	645
140	26-Apr-2009	23	689
141	26-Apr-2009	24	812
142	26-Apr-2009	94	608
143	26-Apr-2009	95	739
144	26-Apr-2009	96	757
145	27-Apr-2009	1	680
146	27-Apr-2009	2	678
147	27-Apr-2009	3	673
148	27-Apr-2009	39	117
149	27-Apr-2009	42	360
150	27-Apr-2009	43	151
151	27-Apr-2009	46	535
152	27-Apr-2009	47	426
153	27-Apr-2009	55	364
154	27-Apr-2009	56	319
155	27-Apr-2009	91	502
156	27-Apr-2009	94	858
157	27-Apr-2009	95	767
158	28-Apr-2009	42	709
159	28-Apr-2009	45	283
160	28-Apr-2009	46	424
161	28-Apr-2009	47	576
162	28-Apr-2009	50	506
163	28-Apr-2009	56	459
164	28-Apr-2009	78	194
165	28-Apr-2009	85	827
166	28-Apr-2009	86	730
167	28-Apr-2009	87	577
168	28-Apr-2009	90	605
169	28-Apr-2009	91	691
170	28-Apr-2009	92	728

171	28-Apr-2009	93	637
172	28-Apr-2009	94	425
173	28-Apr-2009	95	416
174	28-Apr-2009	96	528
175	29-Apr-2009	1	627
176	29-Apr-2009	2	717
177	29-Apr-2009	8	449
178	29-Apr-2009	9	598
179	29-Apr-2009	10	674
180	29-Apr-2009	11	702
181	29-Apr-2009	44	269
182	29-Apr-2009	45	243
183	29-Apr-2009	59	324
184	29-Apr-2009	62	163
185	29-Apr-2009	63	172
186	29-Apr-2009	68	361
187	29-Apr-2009	91	261
188	29-Apr-2009	94	657
189	29-Apr-2009	95	809
190	29-Apr-2009	96	834
191	30-Apr-2009	1	618
192	30-Apr-2009	2	350
193	30-Apr-2009	3	319
194	30-Apr-2009	4	421
195	30-Apr-2009	5	240
196	30-Apr-2009	6	255
197	30-Apr-2009	7	113
198	30-Apr-2009	10	413
199	30-Apr-2009	11	543
200	30-Apr-2009	18	1012
201	30-Apr-2009	19	1213
202	30-Apr-2009	20	1352
203	30-Apr-2009	21	1500
204	30-Apr-2009	22	1523
205	30-Apr-2009	23	1513
206	30-Apr-2009	43	366
207	30-Apr-2009	44	289
208	30-Apr-2009	47	339
209	30-Apr-2009	86	819
210	30-Apr-2009	87	881
211	30-Apr-2009	90	604
212	30-Apr-2009	93	742
213	30-Apr-2009	94	1252
214	30-Apr-2009	95	1152
215	30-Apr-2009	96	1098

216	01-May-2009	1	1283
217	01-May-2009	2	1192
218	01-May-2009	3	911
219	02-May-2009	61	697
220	02-May-2009	62	685
221	04-May-2009	49	1154
222	04-May-2009	50	1189
223	04-May-2009	55	1351
224	04-May-2009	56	1110
225	04-May-2009	64	864
226	05-May-2009	67	346
227	06-May-2009	59	317
228	06-May-2009	60	99
229	06-May-2009	63	312
230	06-May-2009	94	410
231	07-May-2009	1	412
232	07-May-2009	4	324
233	07-May-2009	19	245
234	07-May-2009	20	264
235	07-May-2009	23	290
236	07-May-2009	87	908
237	07-May-2009	88	655
238	07-May-2009	91	597
239	07-May-2009	92	599
240	07-May-2009	93	603
241	07-May-2009	94	600
242	07-May-2009	95	506
243	08-May-2009	3	465
244	08-May-2009	4	488
245	08-May-2009	46	261
246	08-May-2009	91	568
247	08-May-2009	94	813
248	08-May-2009	95	569
249	08-May-2009	96	647
250	09-May-2009	1	635
251	09-May-2009	2	511
252	09-May-2009	3	452
253	09-May-2009	4	388
254	09-May-2009	5	391
255	09-May-2009	12	695
256	09-May-2009	13	838
257	09-May-2009	14	904